

Form
A
TP: _____

HW#62: Radicals/Exponents Review
Due Date: Friday, February 7th, 2014

Name: _____

Failure to show work on all problems or use complete sentences will result in a LaSalle.

<p>1) Simplify: $\frac{3gh^3}{12g^3h^{-2}}$</p> $\frac{3 \cdot g \cdot h^3}{12 \cdot g^3 \cdot h^{-2}}$ <p>*Neg. exponent - take reciprocal!</p>	<p>2) Simplify:</p> $\frac{(2y^0)^3}{x^{-1}y^2 \cdot xy^4}$ <p>*Zero exp. - turns to 1</p>
<p>3) $(3x + 2)(5x - 1)$ is equivalent to:</p> <p>A. $20x^2$</p> <p>B. $8x + 1$</p> <p>C. $15x^2 - 2$</p> <p>D. $8x^2 + 4x + 1$</p> <p>E. $15x^2 + 7x - 2$</p> <p>F: O: I: L:</p>	<p>4) What is the area of the figure below?</p> <div style="display: flex; align-items: center;"> <div style="border: 1px solid black; padding: 10px; margin-right: 20px;"> <p>AREA:</p> </div> <div> <p>Width: $(x - 5y)$</p> <p>Length: $(2x + y)$</p> <p>F: O: I: L:</p> </div> </div> <p style="text-align: right;">L • W</p>
<p>5) Simplify:</p> $2\sqrt{45} + 2\sqrt{5}$ $2 \cdot \sqrt{45} + 2 \cdot \sqrt{5}$	<p>6) Simplify:</p> $-2\sqrt{18} - 3\sqrt{8}$ $-2 \cdot \sqrt{18} - 3 \cdot \sqrt{8}$

STAY READY.

7)

8. Today's newspaper reported that the price of a gallon of milk 10 years ago was 70% of today's price for a gallon of milk. Today's price for a gallon of milk is \$2.50. Which of the following is closest to the price of a gallon of milk 10 years ago?

- F. \$0.70
- G. \$0.75
- H. \$1.75
- J. \$1.80
- K. \$2.43

① Change % to decimal!
 ② (% as decimal) (total)
 ③ should you add or subtract it from the total?

8) You are eating dinner with three of your friends and the bill is \$48.00. How much money will you pay in total if you are leaving a 20% tip?

9) Simplify: $\sqrt[3]{343}$

$_\cdot_\cdot_\ = 343?$
 (same # times
 itself THREE times)

10) Simplify: $\sqrt{128m^3}$

$\sqrt{128} \cdot \sqrt{mmm}$
 $\sqrt{} \cdot \sqrt{}$

STAY READY.

Form A

HW#63: Multiply Complex Numbers
Due Date: Monday, February 10th, 2014

Name: _____

TP: _____

Failure to show work on all problems or use complete sentences will result in a LaSalle.

$$i^2 = -1 \quad i = \sqrt{-1}$$

1) $4i(9i) =$

$$4(9) = 36$$

$$i(i) = i^2 = -1$$

$$36(-1) = \boxed{-36}$$

2) $4i(-6 + i) =$

$$4i(-6) = \boxed{}$$

$$4i(i) = \boxed{}$$

Now multiply these two!

3) $(-2i)^4$

$$(-2 \cdot i)^4$$

$$-2^4 \cdot i^4$$

*Simplify i^4 ! Remember, $i^2 = -1$!

4) $(9 - 2i)(-4 + 7i)$

F:

O:

I:

L:

7) Simplify: $\sqrt[3]{48u^4v^2}$

$$\sqrt[3]{48u^4v^2}$$

$$\sqrt[3]{48}$$

$$\sqrt[3]{uuu}$$

$$\sqrt[3]{vv}$$

6) Simplify: $-3\sqrt[3]{200b^3}$

$$-3\sqrt[3]{200b^3}$$

*Don't forget to multiply by -3 @ the end!

STAY READY.

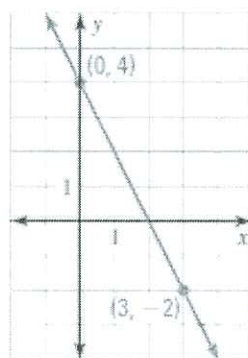
7) Simplify: $\sqrt{150k^3} =$

8) Simplify: $\sqrt{216x^3} =$

9) Find the slope of $(-8, 2)$ and $(-5, 11)$.

$$\frac{y_2 - y_1}{x_2 - x_1}$$

10) Determine the slope of the graph below.



RISE
RUN

*Is this a NEGATIVE
or POSITIVE slope?

11)

What is 125% of 332?

- A. 41.5
- B. 265.6
- C. 415
- D. 4,150
- E. 41,500

12)

The regular price of a calculator is \$49.95 before taxes. It goes on sale at 20% below the regular price. Before taxes are added, what is the sale price of the calculator?

- F. \$ 9.99
- G. \$24.98
- H. \$29.95
- J. \$39.96
- K. \$44.95

*LOOK @ steps on HW 62 #7!!

STAY READY.